Microbial Sequencing Centers

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Influenza Genome Sequencing Project

The Influenza Genome Sequencing Project was launched in 2004 to provide the scientific community with complete genome sequence data for thousands of human and animal influenza viruses. With this enhanced genome knowledge base, the NIAID-funded project aims to help researchers understand how flu viruses evolve, spread and cause disease.

This project has the potential to not only improve the scientific understanding of influenza viruses, but also to uncover potential targets for new vaccines, therapies and diagnostics, and enhance knowledge of the overall molecular evolution of influenza viruses and other genetic factors that may determine their virulence.

The project may also enhance scientists' understanding of the emergence of influenza epidemics and pandemics by observing how influenza viruses evolve as they spread through the population and by matching viral genetic characteristics with virulence, ease of transmissibility, and other properties.

The sequencing effort will be conducted in part by the NIAID Microbial Sequencing Center at The Institute for Genomic Research (TIGR). NIAID will rapidly make sequence information publicly available through GenBank®, an international, searchable online database funded by NIH, and the NIAID Bioinformatics Resource Centers, a Web-accessible collection of genetic sequence information and data analysis tools.

By September 27, 2006, the genomic sequences of **1572 human and avian influenza isolates** had been made available through this program to researchers, and many more are in the pipeline.

For more information about the project contact Dr. Maria Y. Giovanni, NIAID Director of the Influenza Genome Sequencing Project, at mgiovanni@niaid.nih.gov, or visit:

- Influenza Genome Sequencing Project Site: http://www.niaid.nih.gov/dmid/genomes/mscs/influenza.htm
- TIGR Influenza Virus Sequencing Site: http://www.tigr.org/msc/infl_a_virus.shtml
- NCBI Influenza Virus Resource Site: http://www.ncbi.nlm.nih.gov/genomes/FLU/FLU.html